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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,867	01/27/2000	Masanobu Funakoshi	35.C14210	9166
5514	7590 03/27/2002			
FITZPATRICK CELLA HARPER & SCINTO			EXAMINER	
	EFELLER PLAZA RK, NY 10112		TO, BAOQUOC N	
			ART UNIT	PAPER NUMBER
			2172	
			DATE MAILED: 03/27/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

· ·		$oldsymbol{eta}$			
	Application No.	Applicant(s)			
	09/491,867	FUNAKOSHI, MASANOBU			
Office Action Summary	Examiner	Art Unit			
	Baoquoc N To	2172			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on		•			
, <del>-</del>	is action is non-final.				
3) Since this application is in condition for allowatelosed in accordance with the practice under a Disposition of Claims					
4)⊠ Claim(s) <u>1-23</u> is/are pending in the application	,				
4a) Of the above claim(s) is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-23</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or Application Papers	r election requirement.				
9) The specification is objected to by the Examine	r.				
10)☐ The drawing(s) filed on is/are: a)☐ accep	oted or b)  objected to by the Exa	miner.			
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).			
11)☐ The proposed drawing correction filed on	is: a) ☐ approved b) ☐ disappro	oved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)⊠ All b)□ Some * c)□ None of:					
1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents	s have been received in Applicati	on No			
<ul> <li>3. Copies of the certified copies of the prior application from the International But</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	<b>G</b>			
14) Acknowledgment is made of a claim for domestic	c priority under 35 U.S.C. § 119(	e) (to a provisional application).			
<ul> <li>a)  The translation of the foreign language pro</li> <li>15) Acknowledgment is made of a claim for domesting</li> </ul>	• •				
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Patent and Trademark Office					

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## **DETAILED ACTION**

1. Claims 1-23 are presented for examination.

## 2. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7-16, and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (US. Patent No. 5,987,460).

Regarding on claims 1, 12, and 23, Niwa teaches the information retrieval apparatus comprising:

input means for entering retrieval condition (keywords) [col. 5, ,lines 18-23];

determination means for determining, on the results of retrieval respectively for the plural information to be retrieved of a high degree of coincidence, the output feature amount of each result of retrieval according to each degree of coincidence [col. 7, line 67 and col. 8, lines 1-44];

and output means for outputting said results of retrieval with an output mode based on each output feature amount [col. 7, lines 66 and col. 8, lines 1-7 and fig. 16].

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Although, Niwa does not explicitly teaches calculation means for calculating the degree of coincidence between said retrieval condition and each information to be retrieved in said database. However, Niwa teaches the calculation of the frequency of the appearing keywords in the documents for the documents retrieval [col. 9, lines 16-20]. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the calculation of the word frequency to calculating the degree of coincidence to retrieve the precise results as claim.

Regarding on claims 2 and 13, Niwa teaches database stores language information (keywords) in respective correspondence with each of said information to be retrieved [col. 5, lines 39-42];

said input means is adapted to enter said retrieval condition by a natural language (keywords corresponding to the natural language) [col. 5, lines 19-23]; and

calculation means is adapted to execute language analysis of said retrieval condition entered by the natural language (applicant admits executed language analysis is the known in the art) [See Specification page 13, lines 9-18], however, Niwa does not explicitly teach calculating the degree of language coincidence between the result of said language analysis and the language information assigned to each information to be retrieved. However, Niwa teaches the calculation of keywords occurrence in the text document [col. 9, lines 16-20]. This calculation can also be used to calculate the matching degree between the language input and the keywords that occurrence in the text document. This calculation calculates the keywords assigning to the information and keywords that occur in the document. Therefore, it would have been obvious to one

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ordinary skill in the art at the time of the invention to modify the calculation of keyword to the calculation of degree of language coincidence to achieve the retrieval results.

Regarding to claims 3 and 14, Niwa teaches output feature amount is the output size [fig. 16], and said determination means is adapted to determine a larger output size for a result of a higher degree of coincidence [col. 9, lines 16-20].

Regarding on claims 4 and 15, Niwa teaches retrieval result is an image (the word ROM is an image itself, and said output size is the image size (the size of the ROM is also increase [224 area for displaying topic-words, fig. 8].

Regarding on claims 5 and 16, Niwa teaches retrieval result is a text, and said output size is the character size [224 area for displaying topic-word, fig. 8].

Regarding on claims 7 and 18, Niwa teaches retrieval result is an image or a text, and said output feature amount is the display position [col. 7, lines 66 and col. 8, lines 1-2] and said determination means determines the display position so as to be closer to a specified position for a retrieval result of a higher degree of coincidence [col. 8, lines 24-44].

Regarding claims 8 and 19, Niwa does not explicitly teach specified position is the center of a display area. However, Niwa teaches the center display is set between the word "publishing" and "electronic" [col. 8, lines 13-17]. The position of displaying or important position is known in the art. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the center display for the user easily can view the relationship between retrieval results.

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Regarding on claims 9 and 20, Niwa teaches determination means determines the distance from said specified position according to said degree of coincidence and determines the display positions of the retrieval results in the positions at said determined distances so as to minimize the mutual overlap of the retrieval results [col. 7, lines 60-67 and col. 8, lines 1-44].

Regarding on claims 10 and 21, Niwa teaches determination means determines the output feature amount of each retrieval result, for each of the retrieval results corresponding to the information to be retrieved of a predetermined number in the descending order of the degree of coincidence [col. 10, lines 62-67 and col. 11, lines 10-13].

Regarding on claims 11 and 22, Niwa teaches determination means determines the output feature amount of each retrieval result, for each of the retrieval results corresponding to the information to be retrieved having degrees of coincidence exceeding a predetermined threshold value [col. 8, lines 64-67 and col. 9, lines 1-8].

3. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (US. Patent No. 5,987,460) in view of Miike et al. (US. Patent No. 5,787,414).

Regarding on claims 6 and 17, Niwa does not teach retrieval result is audio data, and said output size is the loudness thereof. However, Miike teaches, "...the outputs the matching environment information and the related target data as the retrieval result in the visual oriented output method such as the character or icon display, or the audio

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oriented output method such as speech and artificial sound output." [col. 57, lines 33-37]. The method of outputting the retrieval audio data through the speaker and the magnitude of the out put size is determined according to the relevance of the retrieval are known in the art. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the teaching of Miike into Niwa because by utilizing the audio oriented output method would help the user in determining the which of the audio data is relevance to the search.

## 4. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail <a href="mailto:baoquoc.to@uspto.gov">baoquoc.to@uspto.gov</a>. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231.

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The fax numbers for the organization where this application or proceeding is assigned are as follow:

> [After Final Communication]] (703) 746-7238

[Official Communication] (703) 746-7239

[Non-Official Communication] (703) 746-7240

Hand-delivered responses should be brought to:

Crystal Park II 2121 Crystal Drive Arlington, VA 22202 Fourth Floor (Receptionist).

SUPERVISORY PATENT EXAMINER **TECHNOLOGY CENTER 2100** 

Baoquoc N. To

March 18, 2002